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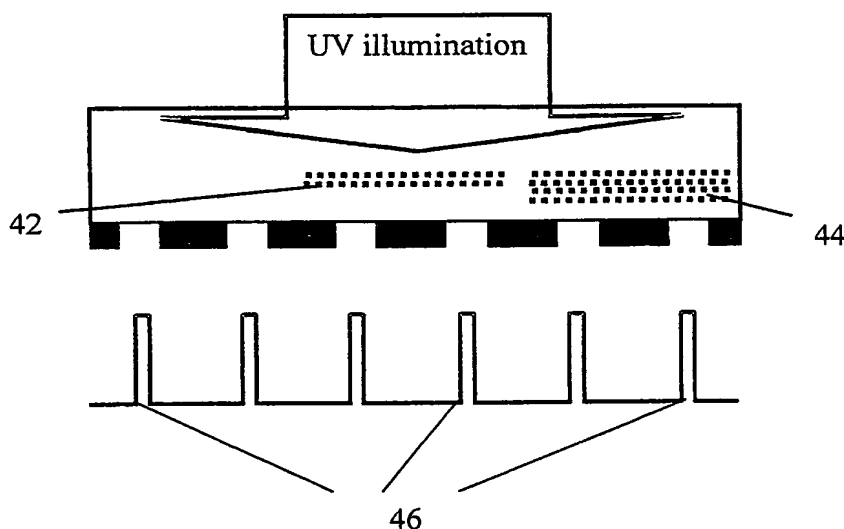
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(54) Title: **METHOD FOR CORRECTING CRITICAL DIMENSION VARIATIONS IN PHOTOMASKS**



(57) Abstract: A method for compensating for critical dimension (CD) variations of pattern lines of a wafer, by the correcting the CD of the corresponding photomask. The photomask comprises a transparent substrate having two substantially opposite surfaces, a first back surface and a second front surface on which front surface an absorbing coating is provided, on which the pattern lines were formed by removing the coating at the pattern lines. The method comprises: determining CD variations across regions of a wafer exposure field relating to the photomask; and providing Shading Elements (SE) within the substrate of the photomask in regions which correlates to regions of the wafer exposure field where CD variations

greater than a predetermined target value were determined, whereby the shading elements attenuate light passing through the regions, so as to compensate for the CD variations on the wafer and hence provide and improved CD tolerance wafer.

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